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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/590,086

08/22/2006

Jean-Francois Hamet

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GREER, BURNS & CRAIN
300 S WACKER DR
25TH FLOOR
CHICAGO, IL 60606

EXAMINER

CHO, JAMES HYONCHOL

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/590,086	Applicant(s) HAMET ET AL.	
	Examiner James H. Cho	Art Unit 2819	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-22 is/are rejected.
- 7) ☒ Claim(s) 12-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt is acknowledged of the Amendment filed 10/27/2008.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-10 and 14-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Parmentier et al. (US PAT No. 3,717,773).

Regarding claim 1, Figs. 1-4 of Parmentier teaches a superconductive inductive component (neuristor transmission line 20 is a passive device which has an inherent inductance) comprising: having at least two terminals (terminals Input and Output as shown in Fig. 1), said component comprising at least one line segment (24) incorporating at least one terminal of the component (coupled to Input), said line segment constituting a conducting or superconducting layer (24 is a superconducting layer) within cooperating with a stack of thin layers of alternately an electrically insulating material and a superconductive material (stack having superconducting layer 24, an insulating layer 26, and superconducting layer 22, which alternates) , said component further including tuning means (36 connected to terminals 31 which are connected to 24 and 26 as shown in Fig. 3, see col. 5, lines 50-59) producing a resistive connection between at least two of said superconductive layers (the resistor provides the resistive connections between 31s).

Regarding claim 2, Figs. 1-4 of Parmentier teaches the component according to claim 1 characterized in that said stack is positioned on a superconductive track (the stack comprising 22, 26, 24 is a superconducting transmission line or track).

Regarding claim 3, Figs. 1-4 of Parmentier teaches the component according to claim 1, wherein a connection between two of said superconductive layers connected by the tuning means has more or less uniform resistance in said stack (the resistance connected between the terminals 31 is a fixed resistor, i.e. uniform since it is not variable).

Regarding claim 4, Figs. 1-4 of Parmentier teaches teaches the component according to claim 1, wherein a connection between two of said superconductive layers connected by the tuning means has a variable resistance within said stack (the resistor connected between 31s inherently varies according to surrounding environment, and thus it is being variable according to surrounding environment).

Regarding claim 5, Figs. 1-4 of Parmentier teaches the component component according to claim 1, wherein the tuning means comprise at least one substance (resistor connected between the terminals 31 shown in Fig. 4) applied to all or part of the section of said stack so as to produce a resistive connection between at least two superconductive layers.

Regarding claim 6, Figs. 1-4 of Parmentier teaches the component according to claim 5, characterized in that the tuning means have resistance characteristics which vary as a function of a physical or chemical variable, termed a control variable, specific to the environment of the component (a typical resistor inherently varies as the environment, such as temperature varies).

Regarding claim 7, Figs. 1-4 of Parmentier teaches the component according to claim 5, wherein the tuning means have a resistance controlled by an exposure or a variation of exposure to a light radiation (a typical resistor inherently varies as the environment, such as a light radiation varies).

Regarding claim 8, Figs. 1-4 of Parmentier teaches the component according to claim 5, wherein the tuning means have a resistance controlled by a variation of temperature (a typical resistor inherently varies as the environment, such as temperature varies).

Regarding claim 9, Figs. 1-4 of Parmentier teaches the component according to claim 5, wherein the tuning means have a resistance controlled by an exposure or a variation of exposure to a magnetic field (a typical resistor inherently varies as the environment, such as a magnetic field varies).

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Regarding claim 10, Figs. 1-4 of Parmentier teaches the component according to claim 5, wherein the tuning means have a resistance controlled by an exposure or a variation of exposure to an electric field (a typical resistor inherently varies as the environment, such as an electric field varies).

Regarding claim 14, Figs. 1-4 of Parmentier teaches an electronic device including a superconductive inductive component having at least two terminals (Input and Output in Fig. 1), said component comprising at least one line segment (24 being a superconductive element) incorporating at least one plot of the component (24 being a plot of the stack 20), said line segment constituting a conducting or superconducting layer within cooperating with a stack of thin layers of alternately an electrically insulating material and a superconductive material (stack having superconducting layer 24, an insulating layer 26, and superconducting layer 22, which alternates), and further includes tuning means (36 connected to terminals 31 which are connected to 24 and 26 as shown in Fig. 3, see col. 5, lines 50-59) producing a resistive connection between at least two of said superconductive layers (the resistor provides the resistive connections between 31s).

Regarding claims 15 -19, Figs. 1-4 of Parmentier teaches the device according to claim 14, further configured for providing an optoelectronic transducer function, or said device produces at least one antenna including an inductive superconductive component, or being implemented in a medical imaging device comprising at least one

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antenna including a superconductive inductive component the tuning means of which enable said antenna to be tuned, or a capacitive component such as phase shift radar device. (intended use of the superconductive component : It has been held that a recitation directed to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).).

The method claims of 20-22 are essentially same as the apparatus claims since the process would produce the apparatus as claimed as stated above and thus are similarly rejected.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parmentier et al. in view of Lewis et al. (US PAT No. 6,013,229).

Parmentier et al. teaches the component according to claim 5 where the tuning means is a resistive element (the resistor connected between 31s as shown in Fig. 4, but does not teach the resistive element with metal polymer. However, Lewis et al. teaches a resistor element with metal polymer for the purpose of application in the acoustic wave resonator (col. 1, lines 32- 36). It would have been obvious at the time of invention to provide tuning means producing a resistive connection between at least two of said superconductive layers of Parmentier et al. with the resistive element comprising with metal polymer of Lewis et al. since it would provide the same resistive function.

Allowable Subject Matter

Claims 12-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: one of ordinary skill in the art would not have been motivated to modify the teaching of Parmentier et al. to further includes, among other things, the specific of the tuning means comprising means for controlling the resistance of at least one connection between two superconductive layers connected by the tuning means (claim 12).

Response to Arguments

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Cho whose telephone number is 571-272-1802. The examiner can normally be reached on M-F 6:30 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James H Cho/
Primary Examiner
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